

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

Vol. VI, No. 8

U.S. DEPARTMENT OF AGRICULTURE

August, 1946

Washington, D. C.

LINEMAN SAGS NEUTRAL UNDER ENERGIZED PHASE

Texas Trains Its Foremen

Eight three-day foreman training sessions were held throughout Texas recently. Attendance totalled 150 cooperative linemen and managers during the eight sessions. The program covered foremen's responsibilities, job planning, giving orders, handling grievances, and instructing workers. Each group devoted some time to job instructional training.

Numerous comments from managers are pouring in, recording increased efficiency of their foremen after attending these conferences.

The conference was under the direction of E. L. Williams, Head of the Department of Industrial Education, Texas A. & M. College. Due to the large territory involved in covering the state of Texas with a safety and job training program, Mr. Williams has four supervisors assisting in this work. They are E. E. Nauert, G. C. Baker, M. D. Kaderli, and Q. C. Bridges.

Missouri Makes It NINETEEN

Missouri managers, cooperating with the Missouri Department of Trade and Industrial Education, have started a safety and job training program. Mr. W. M. Shapperkotter is chairman of the safety and job training advisory committee which met July 16 in the office of Mr. George E. Kohrman, Missouri

(continued on page 4)

Rubber Gloves Would Have Prevented Fatal Accident

The lineman and his helper were dispatched to a section of rural line to repair a neutral conductor which had broken at about the center of the span. The pole at the west end of the span was a dead-end for the line and had a transformer mounted on it with a two-wire service to a member's house. The pole at the east end of the span was a corner pole and had jumpers for disconnecting the line. However, the phase jumper was not removed and the phase conductor remained energized during the entire operation. The transformer on the dead-end pole was attached to the line thru a fused cut-out. The tap from the cut-out was secured to the phase conductor with a split-bolt connector. The arrester was attached to the phase conductor with a live line clamp. Both arrester and cut-out were mounted on an arm above the transformer.

The lineman climbed the dead-end pole without rubber gloves and by the use of an eight-foot hot stick, removed the live line clamp from the primary. This disconnected the arrester only. He did not remove the tap which connected the transformer to the line, nor did he open the cut-out. The lineman apparently thought that in removing the live line clamp, he had de-energized the entire installation.

After completing the work as described, he removed the neutral conductor from its attachment to the dead-end pole and lowered it to the ground. The splice was made and

(continued on page 3)

To An Ohio Line Crew

- Editorial -

"Gentlemen:

Following are seven rules recently established by your safety committee. These rules are for your use and are intended primarily to protect you.

1. Carry and wear rubber gloves on every energized pole.
2. Tag any and every pole when disconnecting.
3. There shall be no reason to work on any line until grounds have been installed.
4. No line truck shall exceed 35 MPH. unless driver of line truck has other orders from lineman in charge.
5. Five feet below the lowest obstruction on every pole, stop and belt off, then LOOK, LISTEN, and THINK.
6. Rubber gloves shall be tested every 30 days. (Lineman Bhaer's responsibility.)
7. Hot sticks shall be returned to factory for testing and dressing. (Lineman Gillen's responsibility.)

Co-op Safety Committee
Richmond, Bhaer, Gillen, Dick

I expect you to observe every rule at all times.

s/ R. P. Luse, Co-op Mgr.
Hancock Wood Electric Cooperative"

This letter came across our desk the other day and caused us to stop and do some thinking. We know that a successful safety and job training program needs the active interest and support of the management. We analyzed Mr. Luse's letter in this manner:

NOW'S THE TIME FOR

SALT TABLETS

Do you feel all fagged out at the end of a good day's work? Do you get up in the morning feeling as if you had not slept well? In other words, is the hot weather getting you down? If this description fits you,--(No, we are not going to suggest a bottle of Dr. Quack's rejuvenator with locked-in vim and vigor in each sparkling bubble)--just eat a little more salt. If your body salt supply is below normal, you can't feel normal. Make up for the salt loss due to excessive sweating by eating extra salt. Salt tablets are a good means of getting this extra salt.

Installing protective grounds and wearing rubber gloves on every energized pole would eliminate approximately 83% of the electric shock accidents on REA lines and prevent approximately 79% of REA fatalities due to electrical shock.

Tagging a line when disconnected insures that a dead line will stay dead.

Belting off five feet below the first obstacle on the pole, and looking the job over before proceeding, insures better planning of the job.

Thirty-five miles per hour for heavy equipment means that it lasts longer and is more often under complete control of the operator than at higher speeds.

The provision for testing hot sticks and rubber gloves not only states the interval between tests but also assigns the responsibility, for seeing that the testing is done, to specific individuals.

We think that this is a good letter. It would require a book of many pages to list all of the things a lineman should do or should not do. The seven suggestions, however, if followed, will prevent the majority of the serious disabling and fatal accidents which are happening to REA linemen every day.

LINEMAN SAGS NEUTRAL

(continued from page 1)

the neutral conductor replaced in its proper location on the pole. The job was completed with the exception of bonding the tail of the guy wire to the neutral wire. The lineman grasped the guy wire in his left hand and in some manner contacted the transformer bushing with his right hand, thereby completing the circuit between phase and ground. The resulting shock rendered him unconscious. He was freed from the circuit by the opening of the fuse cut-out, at which time he slumped in his belt and slid down the pole.

At the time of the accident, the helper was standing on the ground near the point where the guy wire attached to the anchor rod, with his back to the lineman. Approximately ten minutes elapsed before artificial respiration was applied, because the helper did not know how to administer it. The effort to resuscitate the man was unsuccessful. Burns he received from this contact were not severe. They consisted of small burns on both hands, midway between thumb and index finger. No other burns were found when the body was examined later.

SAFETY PRECAUTIONS

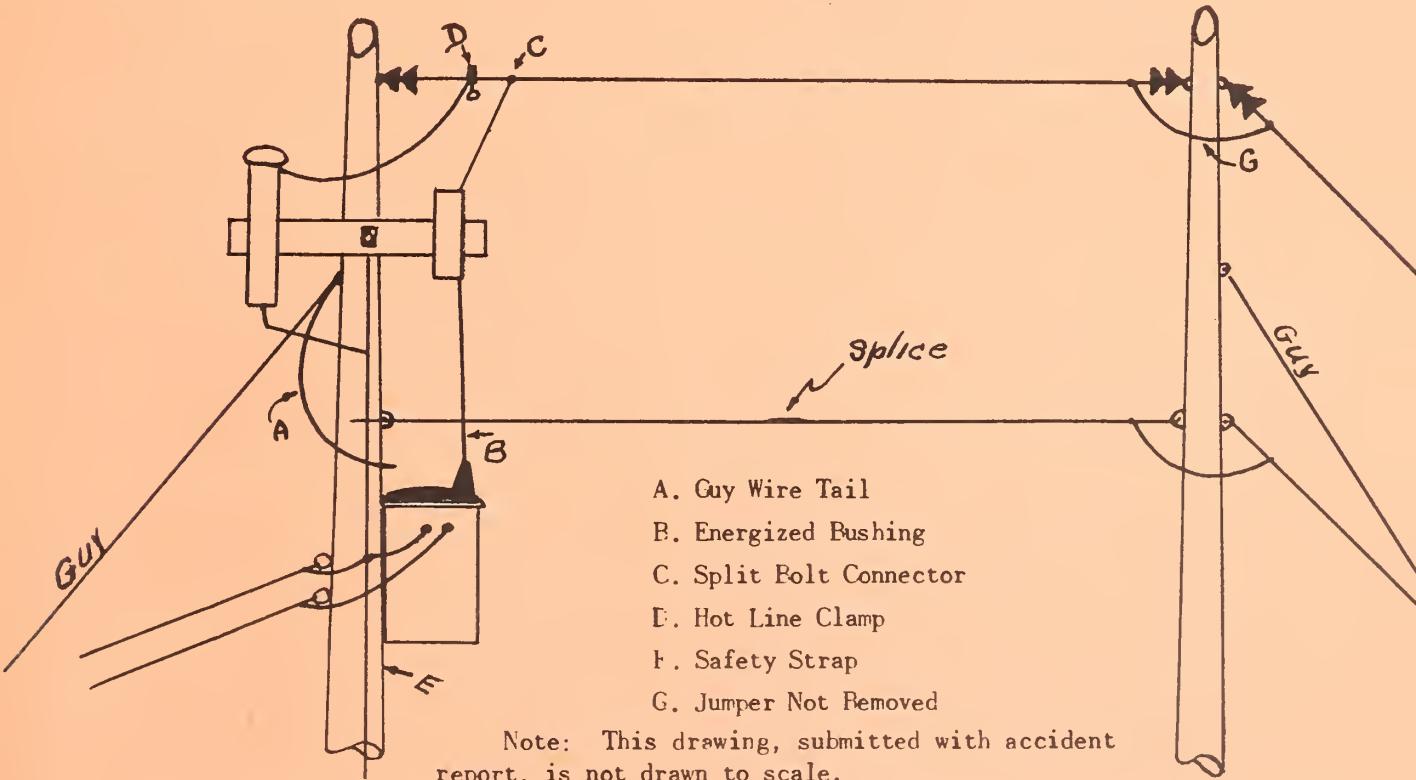
Rubber gloves and protective grounds are cheap insurance. They are furnished free of charge to all linemen by employers. In stringing and sagging conductors on poles carrying energized line, the lineman should first deenergize the line, and second, install protective grounds to guard against accidental energization. Approximately 83% of all electrical shock accidents and about 78% of all electrical shock fatalities could be prevented if PEA linemen would make a habit of always using these two protective devices.

* * *

The first day is not too soon to teach the new man the fundamentals of artificial resuscitation.

* * *

Arrester and cutout taps should be joined so that only one live line clamp attaches these two pieces of equipment to the line.



- A. Guy Wire Tail
- B. Energized Bushing
- C. Split Bolt Connector
- D. Hot Line Clamp
- E. Safety Strap
- F. Jumper Not Removed

Note: This drawing, submitted with accident report, is not drawn to scale.

DON'T TAKE CHANCES UNLOADING POLES

The unloading of poles from a flatcar can be a very hazardous task. Realizing that more and more poles will be received on flatcars, now that the war is over, we reprinted in the June issue of The Lineman a job procedure for the unloading of poles. This is by no means the only way to unload poles safely from a flatcar but it has proved to be safe, and results in no damage or breakage of poles. We believe that every line crew should re-examine the procedure which they are using and determine whether it provides the following safeguards:

1. Load should be bound securely at each end while stakes are cut. Proper binding at each end will allow stakes to be cut safely.
2. After stakes are cut, no member of the crew should be required to be under the car, or near the car, to release the load.
3. The load should be released at a safe distance from the car.
4. The method should provide for the load of poles to be eased down the skids under control of the operator.

The September issue of the Lineman will give the details of a fatal accident which occurred June 20 in unloading poles from a flatcar.

Missouri Makes It NINETEEN (continued)

state supervisor of trade and industrial education. REA welcomes this new program which is the nineteenth state program now in operation.

Mr. Blacklock was engaged as safety and job training supervisor to carry out the program.

THE REA LINEMAN is published monthly in the interest of safety for employees of REA systems. Vol. VI, No. 8, August, 1946. David A. Fleming, Editor.

dEre EdD/TeR

A New Man's First Day on the Job

What made up my mind about becoming a lineman was that I couldn't see no future in jerkin' sodas. They are still using the same old flavors they used twenty years ago, while this electricity business is expanding all the time.

My foreman is pretty good. He said that they needed lots of help right now and if I would keep my eyes open I might learn something. The first day he gave me a shovel and sent me out with a fellow named Ben to dig holes. The foremen sure is interested in me because the last thing he said was for us to be careful. I asked Ben what of, and Ben said he hadn't found out yet but he had an idea.

He says it sure is surprising what will fall in them pole holes in even one night and to expect anything if it is a week before the pole crew gets the poles set. Ben says that they just tamp whatever they find right in with the pole, because no-one ever misses a couple of sheep or a half dozen chickens.

Some outfits cover the holes with wooden covers as soon as they are dug. It's a lot of trouble though and slows down production. Our foreman wants to get the job done quick. I got to wondering what if a horse stepped in a hole and broke a leg or if one of the small kids from the country school should fall in. They'd have to be shot. The horses, that is, not the kids. Ben says there ain't no use to go borrowing trouble especially when it hasn't happened yet. I can hardly wait till pay day. You'll be hearing from me again.

Yours truly,
I. M. Numan

RESIGNATION

Word has been received of the resignation of C. J. Pirkle, South Carolina Safety and Job Training Supervisor.